

Application No. 10/755,244

Amendments to the Claims:

Listing of Claims:

1. (Currently Amended) A drop emitting device comprising:

a first linear array of side by side substantially mutually parallel first columnar arrays of drop emitting nozzles, the first linear array extending along an X-axis, and the first columnar arrays being oblique to the X-axis;

each first columnar array of drop emitting nozzles comprised of a first linear sub-column of N nozzles that is interleaved with and substantially parallel to an associated second linear sub-column of N nozzles so as to form N first pairs of nozzles, wherein each first pair of nozzles includes a nozzle from the first linear sub-column and an adjacent nozzle from the second linear sub-column, and wherein N is greater than 1;

wherein the nozzles of each first pair of nozzles are aligned along the X-axis and substantially parallel to a Y-axis that is orthogonal to the X-axis;

wherein the first linear sub-columns of nozzles emit drops of a first color and the second linear sub-columns of nozzles emit drops of a second color;

a second linear array of side by side substantially mutually parallel second columnar arrays of drop emitting nozzles, the second linear array extending along the X-axis and being adjacent the first linear array along a Y-axis that is orthogonal to the X-axis, and the second columnar arrays being oblique to the X-axis;

each second columnar array having an associated first columnar array displaced therefrom along the Y-axis;

each second columnar array of drop emitting nozzles comprised of a third linear sub-column of N nozzles that is interleaved with and substantially parallel to an associated fourth linear sub-column of N nozzles so as to form N second pairs of nozzles, wherein each second pair of nozzles includes a nozzle from the third linear sub-column and an adjacent nozzle from the fourth linear sub-column;

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each second nozzle pair having an associated first nozzle pair displaced therefrom along the Y-axis;

wherein the nozzles of each second pair of nozzles are offset along the X-axis;

wherein the third linear sub-columns of nozzles emit drops of a third color and the fourth linear sub-columns of nozzles emit drops of a fourth color; and

wherein each of the first through fourth linear sub-columns has a nozzle pitch XP inches along the X-axis.

2. (Original) The drop emitting device of claim 1 wherein the first linear array of side by side substantially mutually parallel columnar arrays of drop emitting nozzles and the second linear array of side by side mutually parallel columnar arrays of drop emitting nozzles emit drops of melted solid ink.

3. (Original) The drop emitting device of claim 1 wherein each of the first through fourth sub-columns of nozzles has a nozzle pitch XP of at most about 1/75 inches along the X-axis.

4. (Original) The drop emitting device of claim 1 wherein each of the first through fourth sub-columns of nozzles has a nozzle pitch XP of at most about 1/37.5 inches along the X-axis.

5. (Original) The drop emitting device of claim 1 wherein the nozzles of each second pair of nozzles are offset along the X-axis by about XP/3 inches.

6. (Original) The drop emitting device of claim 1 wherein the nozzles of each second pair of nozzles are offset along the X-axis by at most about .005 inches.

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7. (Original) The drop emitting device of claim 1 wherein one of the nozzles of each second pair of nozzles is aligned along the X-axis with the associated first pair of nozzles.

8. (Original) The drop emitting device of claim 1 wherein the first and second colors are cyan and magenta.

9. (Original) The drop emitting device of claim 1 wherein the third and fourth colors are yellow and black.

10. (Original) The drop emitting device of claim 1 wherein:
the first and second colors are cyan and magenta;
the third and fourth colors are yellow and black; and
each second nozzle pair is offset relative to its associated first nozzle pair along the X-axis.

11. (Original) The drop emitting device of claim 1 further including:
a first plurality of finger manifolds fluidically coupled to the first linear sub-columns of nozzles;
a second plurality of finger manifolds fluidically coupled to the second linear sub-columns of nozzles;
a third plurality of finger manifolds fluidically coupled to the third linear sub-columns of nozzles; and
a fourth plurality of finger manifolds fluidically coupled to the fourth linear sub-columns of nozzles.

12. (Currently Amended) A drop emitting device comprising:
a non-slanted pair of nozzles aligned along an X-axis and substantially parallel to a Y-axis that is orthogonal to the X-axis;

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a slanted pair of nozzles offset along the X-axis so as to be slanted relative to the X-axis; and

wherein the slanted pair of nozzles is displaced from the non-slanted pair of nozzles along the Y-axis, and

wherein the slanted pair of nozzles emit drops of a first color and drops of a second color, the second color being different from the first color.

13. (Original) The drop emitting device of claim 12 wherein the nozzles of the slanted pair of nozzles are offset along the X-axis by at most .005 inches.

14. (Original) The drop emitting device of claim 12 wherein one of the nozzles of the slanted pair of nozzles is aligned along the X-axis with the non-slanted pair of nozzles.

15. (Currently Amended) The drop emitting device of claim 12 wherein the non-slanted pair of nozzles emit drops of a third first color and drops of a fourth ~~second~~ color.

16. (Canceled)

17. (Original) The drop emitting device of claim 12 wherein the non-slanted pair of nozzles emit cyan drops and magenta drops.

18. (Original) The drop emitting device of claim 12 wherein the slanted pair of nozzles emit yellow drops and black drops.

19. (Original) The drop emitting device of claim 12 wherein the non-slanted pair of nozzles emit cyan drops and magenta drops, and wherein the slanted pair of nozzles emit yellow drops and black drops.

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20. (Currently Amended) A drop emitting device comprising:

a first linear array of columnar arrays of first nozzle pairs, the first linear array extending along an X-axis and the columnar arrays of first nozzles extending obliquely to the X-axis;

wherein the nozzles of each first nozzle pair are aligned along the X-axis;

wherein one nozzle of each first nozzle pair emits drops of a first color and another nozzle of each first nozzle pair emits drops of a second color different from the first color;

a second linear array of columnar arrays of second nozzle pairs, the second linear array extending along the X-axis and the columnar arrays of second nozzles extending obliquely to the X-axis;

wherein the nozzles of each second nozzle pair are offset along the X-axis;

wherein one nozzle of each second nozzle pair emits drops of a third color and another nozzle of each second nozzle pair emits drops of a fourth color;

wherein the first linear array and the second linear array extend along a X-axis, and wherein the second linear array is adjacent the first linear array such that each first nozzle pair has an associated second nozzle pair displaced therefrom along a Y-axis that is orthogonal to the X-axis.